

# Reuse Knowns and Unknowns

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Frakes, W.B. and Kyo Kang, (2005), "Software Reuse Research: Status and Future", *IEEE Transactions on Software Engineering*, 31(7), July, pp. 529-536.

## known knowns

1. You must have upper management support.
2. You need to measure reuse and document the payoff.
3. A phased implementation model is often a good plan.
4. You need to provide education.
5. Methods for domain engineering..
6. Reuse design guidelines.
7. Systematic reuse and DE can work (or not) in an industrial setting.
8. Reuse is not always cost effective.
9. Reuse can significantly improve software productivity and quality.
10. Most organizations very seldom build completely new systems.

## known unknowns

1. How to do systematic reuse and DE for systems of very large size/complexity.
2. How to do systematic reuse and DE for all domains.
3. How to use reuse measures in finance models.
4. How to assure component safety.
5. How to measure component reliability.
6. How to get people to do more reuse/DE experiments and replicate them.
7. How to get people to measure reuse and DE.
8. Prescriptive linkage from DA to DI.
9. How the various DA methods compare.
10. Is reusability a valid concept?

## Unknown knowns?

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Some Resources – ReNews <http://wfrakes.wordpress.com/>, ICSR [www.isase.org](http://www.isase.org)